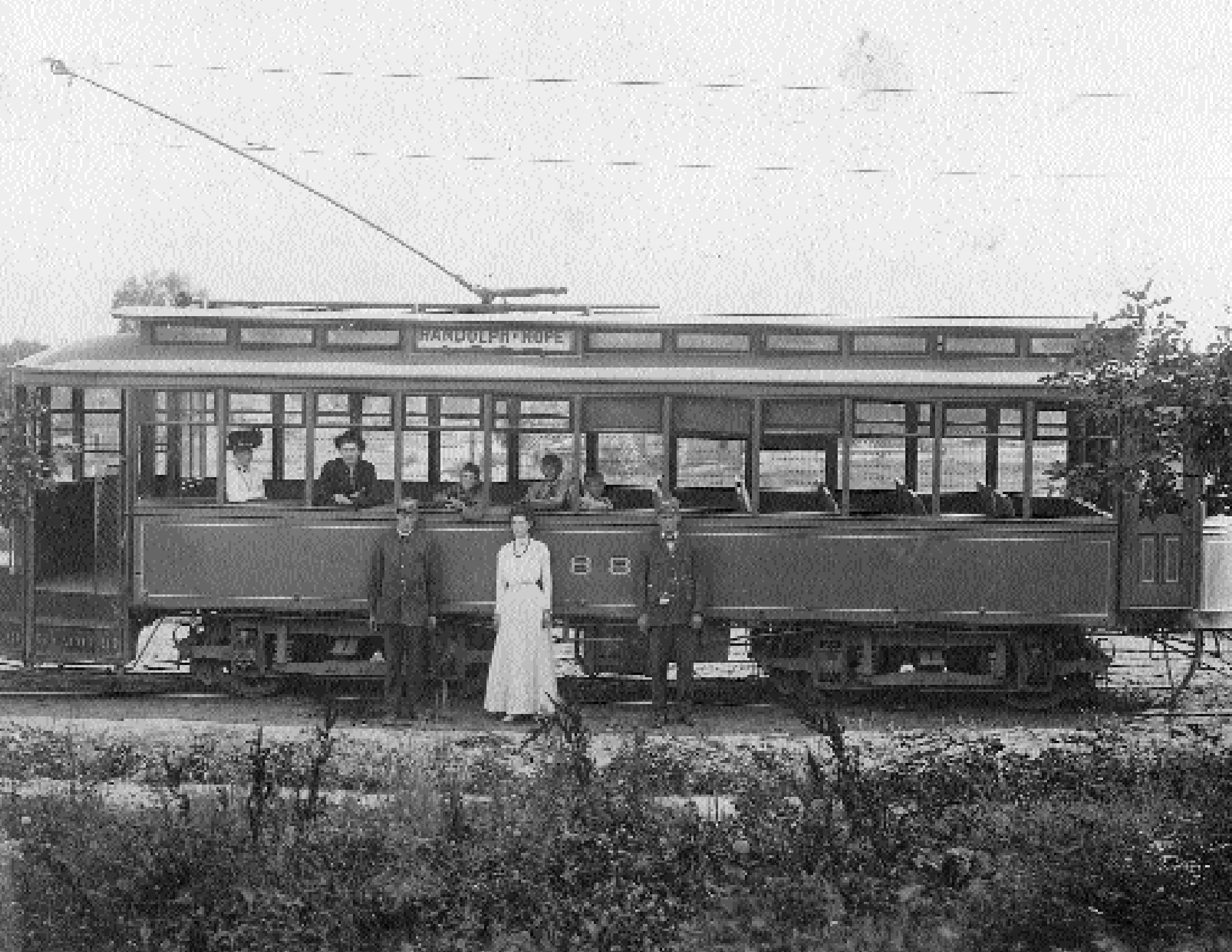




SUMMER 2009





TWIN CITY LINES

Twin City Lines is published quarterly by the

Minnesota Streetcar Museum
P. O. Box 14467 University Station
Minneapolis, MN 55414-0467
(952) 922-1096
www.trolleyride.org

Vol. 3, No.3

Editorial staff

Aaron Isaacs
Editor

3816 Vincent Avenue South
Minneapolis, MN 55410
612-929-7066
aaronmona@aol.com

Sandra Bergman
Production Editor

Twin City Lines is published quarterly and is mailed to members in good standing without charge under Third Class postal permit.

The Minnesota Streetcar Museum operates the Como-Harriet Streetcar Line in Minneapolis and the Excelsior Streetcar Line in Excelsior. Its mission is to preserve Minnesota's electric railway heritage.

BOARD OF DIRECTORS and OFFICERS

Chair	David French
Vice-Chair	Aaron Isaacs
Treasurer	Scott Heiderich
	James A. Vaitkunas
	Chris Heck
	Bob Bayers
	Darel Leipold

Rod Eaton, General Superintendent,

Robert Johnson, Superintendent,
Excelsior Line

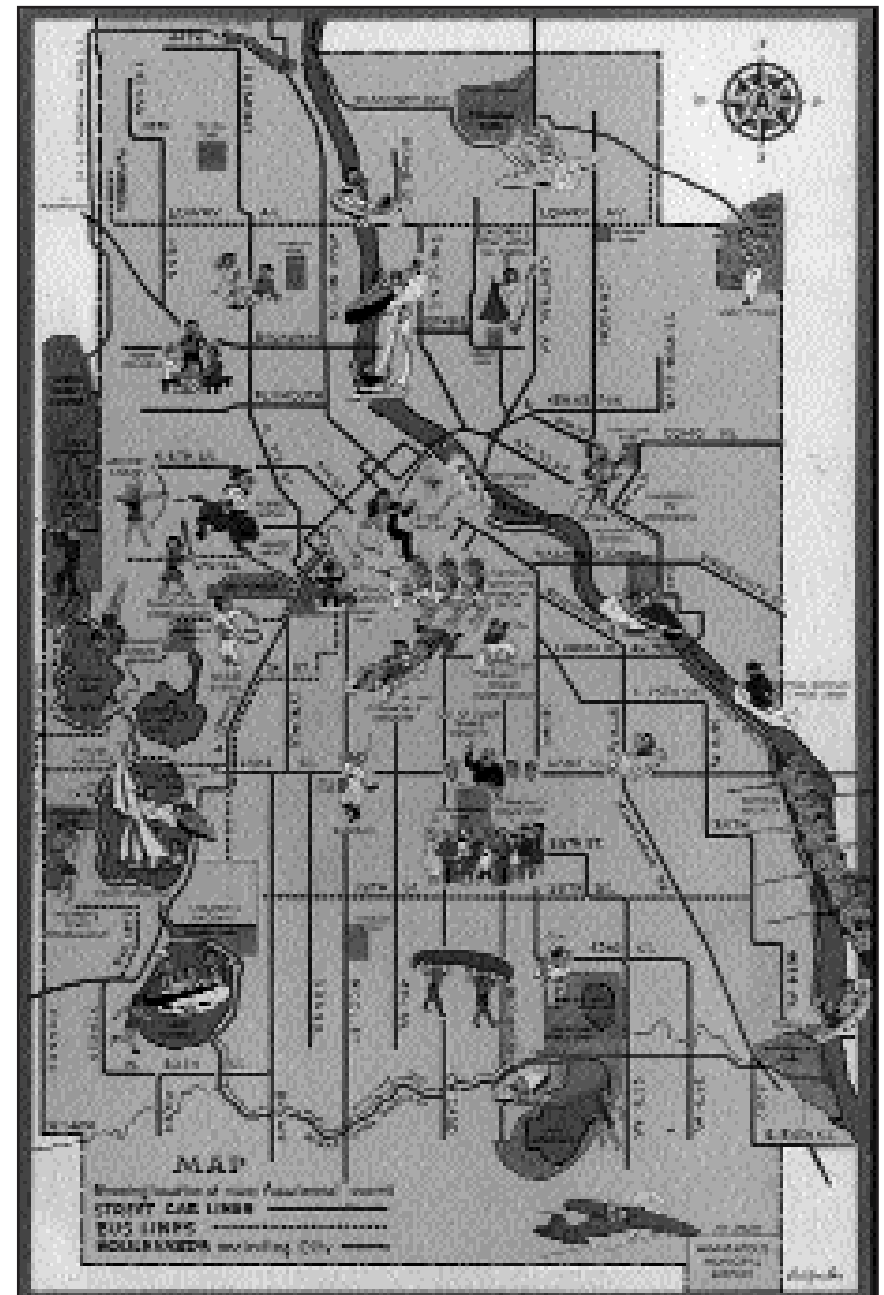


CORRECTIONS AND NEW INFO

The photo at the top of page 10 in the last issue shows 7th Street at 2nd Avenue N., not 3rd Avenue N.

Barney Olsen writes:

"The photo of the Hudson Commodore climbing the bullnose safety island brought back memories. When I was a student in the third grade at Desnoyer Park grade school (on Pelham Avenue near Beverly Road, grades K through 4), one of my classmates, Dennis Paul, was waiting for a streetcar one day at University and Vandalia. I was not with him. That would have been 1942 or 1943. There was a safety island at Vandalia, but it was before the bullnose islands. Instead, there was a low concrete curbing at the end where traffic approached no more than one or two feet high shaped to deflect a motor vehicle. This curbing ended at a concrete slab about three or four feet high and nearly a foot thick placed perpendicular to the flow of traffic. It was set to span the width of the safety island, which was raised above the roadway level. This slab was not secured to the ground except by its own weight. Dennis apparently was standing close to this vertical slab, because a car struck the slab hard enough to tip it over, where it landed on one of his legs crushing it below the knee. Amputation was necessary. I always understood that this was a precipitating event leading to the installation of bullnose safety islands at every stop on University Avenue and a few others besides, such as the ones at the GN depot."



Above: In 1940, transit was still an important way to visit Aquatennial events, hence this activity map featuring the complete streetcar and bus system.

Front cover: In a scene that could have been composed by Norman Rockwell, businesslike pedestrians cross 6th Street as a Nicollet-2nd Street NE PCC passes on Marquette Avenue. Minneapolis Star-Tribune, Minnesota Historical Society collection.

Inside front cover: In the first decade or so of the 20th century, it was common for commercial photographers to stop by the end of a streetcar line and pose the crew and occasional passenger during their layover. This is a particularly good example, taken about 1910, although we don't know the St. Paul location. The car is one of 32 in the short C-3 class, built in 1901 and only 37 feet 7 inches long.

MSM NEWS SUMMARY

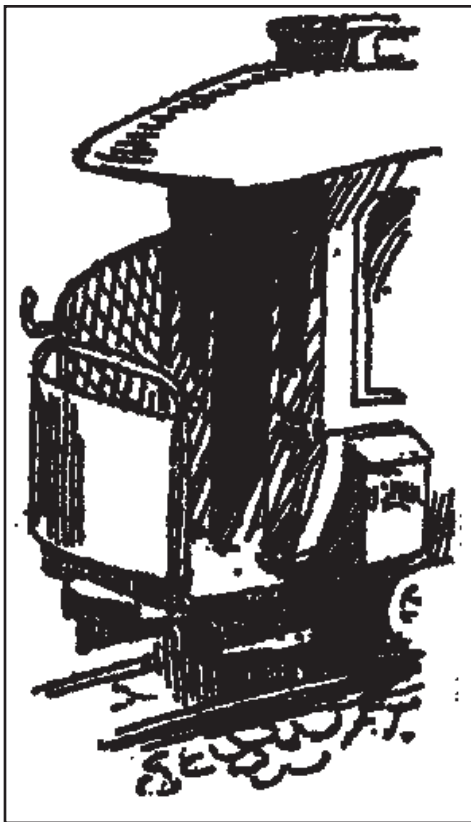
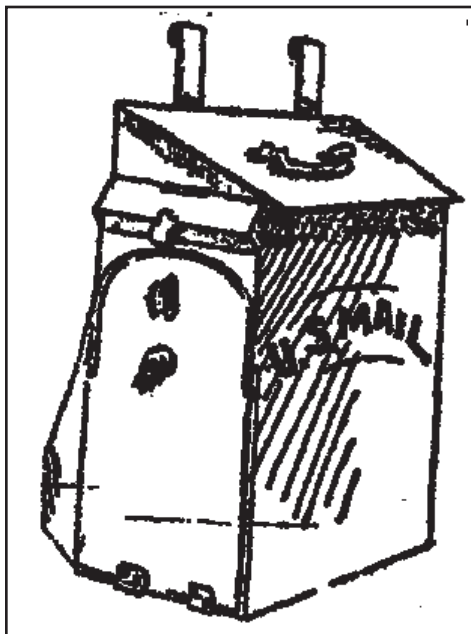
See Streetcar Currents for the full story (www.trolleyride.org)

This summer saw the debut of a new special event, the PJ Party. MSM has teamed with the nearby Wild Rumpus children's bookstore. Parents bring their children, dressed in pajamas, to Lake Harriet. Cookies and milk are served at the depot, followed by an evening streetcar ride. When the car reaches the carbarn, it stops so a local children's book author can read to the passengers. The first trip in June sold out, so the July and August events were expanded to two back-to-back trips. Both sold out. The PJ Party trips will continue through September.

MORE ON MAIL BY STREETCAR

History research has suddenly become much easier, because historic newspapers are being digitized with software that permits keyword searches. Russ Olson has taken advantage of this to discover more about the origins of mail carried on streetcars. It started with the Interurban that connected Minneapolis with St. Paul via University Avenue and opened on December 9, 1890. By mid-1891, the streetcars had diverted enough passengers from the three competing inter-city railroads that it was impacting mail service, as described in the Minneapolis Tribune's June 14, 1891 edition.

"The reduction of the number of short line trains between St. Paul and Minneapolis has seriously affected the postal arrangements between the two cities. The transmission of mail has not only become less frequent, but a letter mailed in Minneapolis after 3 o'clock p. m. does not reach St. Paul in time to be delivered the day of mailing and vice versa. Accordingly the chief of the railway mail service and the local



postal authorities have decided to use the interurban electric lines for carrying the mails."

Streetcar mail service began on August 3, 1891. Here's an edited description of it from two Trib articles. "The boxes are now being prepared and fastened to the cars... They are light and simple affairs, made of heavy zinc and are about a foot and a half high by a foot wide... They are painted bright yellow to correspond with the decoration of the car and bear only the inscription 'U. S. Mail'. The slot for the letters is cut simply through the iron and has a hinged cover opening upward. Inside is the letter pocket or drawer, which opens on the hinges below, and is simply drawn out to get at the contents. Two hooks projecting above the box provide for its fastening on the car, while the bottom is so fashioned as to rest securely on the triangular bevel which follows the length of the car... A brass handle on top provides for its carriage to and from the car.

The boxes will be placed on the closed motor cars, and will occupy a convenient position on the right side of the car near the rear end, so that anyone mail easily mail a letter from the platform or in getting on and off the car.

The new service will give 18 interurban mails daily between the hours of 7:30 in the morning and 4:30 in the afternoon. Before or after these hours letters must go by the old route through the post office and by way of the mail trains. The new service will accommodate letters only, no papers being allowed to go by this route.

A messenger will be stationed at First Avenue (now Marquette) and Washington, who will unlock the boxes on the arrival of the car, take from it the mail, sending it immediately to the post office for delivery. He will then, after the mail car has gone around the loop, place within the box all mail for St. Paul."

THE DOUBLE DECKERS

-Russell Olson and Aaron Isaacs

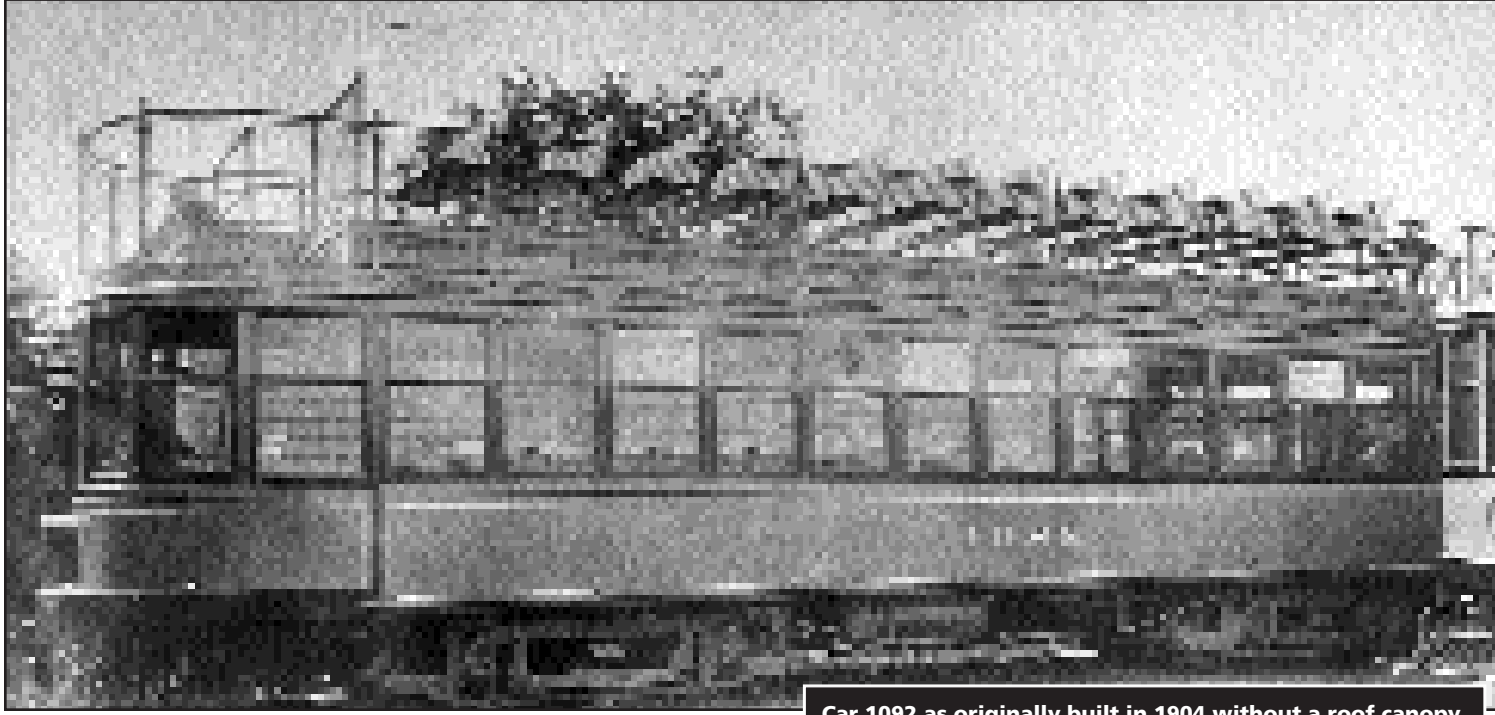
Beginning in 1903, TCRT began considering an experiment with double deck streetcars. The first drawings for a proposed double deck car were dated July 1903. The standard car design was modified by:

1. Moving the trolley base to a stand at the extreme rear.
2. Reinforcing the deck roof and installing 12 transverse four-passenger benches on the roof.
3. Laying a walkway on the lower roof on either side of the benches (about 15 inches from the top of the deck roof.
4. Installing entrance steps with a single pair of folding gates on the front platform together with a straight stairway from the steps to the roof that angled over the motorman's position.
5. Enclosing the upper deck structure with a waist-high framework of gas-pipe railings and wire screening.

The first car selected was number 1092, being completed July 1, 1904, before work was begun on an earlier order for cars 1042-1091. Upon completion the car was placed in sightseeing and charter service. Trial runs were reported on 8-31-04 and 9-27-04.

On August 27, 1904, the Minneapolis Tribune quoted TCRT Vice President Calvin Goodrich, "The car was built as an experiment. If it strikes popular fancy more will be built next summer. I first saw double-decked cars in Europe where they are fairly popular and I imagined Minneapolis might like the same thing. In this country, however, double deckers have been condemned on several different occasions by people in eastern cities."

Double deckers weren't new to the traction industry, but they had the drawback of being slow to load and unload. However, there were two services where this disadvantage mattered less—the sightseers and the pending expansion to Lake Minnetonka



Car 1092 as originally built in 1904 without a roof canopy.

line. Minnetonka cars did most of their loading and unloading at the ends of the line during layover, which minimized this problem.

On June 10, 1905, Goodrich told the Tribune that TCRT was planning to run a trio of three-car trains of double deckers to Lake Minnetonka. Clearly that never happened.

The Street Railway Journal reported that this car was found unsatisfactory, due largely to insufficient weather protection on the upper deck. To fix this, a full height framework was erected, of one-inch gas pipe bolted to sills, resting on special fittings built permanently into the roof. It supported a canvas canopy roof and side screens, with waterproof folding curtains hung down between the side pipe-posts. Overall height was 16 feet 4 inches compared to 11 feet 5 inches for a standard car. With the upper deck in place the car was reported to weigh 52,000 pounds (compared to 46,700 for a comparable standard car), seating 99 persons and accommodating 65 persons standing.

Before double deckers could run to

Lake Minnetonka, restrictive clearances had to be eliminated. The grade of 900 lineal feet of track was lowered at the Cottage City bridge during 1905. The result was the lower set of steps that turn 90 degrees from the rest of the steps, and the retaining walls that run from the steps to and under the bridge. Construction of the Queen Avenue (Linden Hills Blvd.) bridge over the Harriet right of way had been completed during 1905. The grade of 1400 lineal feet of track was lowered at that bridge during 1906.

Plans for a more substantial double deck car were begun in October 1905. Spare Work Order (S.W.O.) 8737 provided for building one double decker. This was car 1145, completed May 25, 1906. A single track line from Lake Harriet to Excelsior had been opened during September 1905.

Contemporaneous car building was authorized as follows:

November 1905: S.W.O. 8745 Build 20 standard carbodies (1146-1165)

January 1906: S.W.O. 8750 Build 20

standard carbodies (1166-1185)
February 1906: S.W.O. 8759 Build 10 double deck carbodies (1186-1195)
During March 1906: S.W.O. 8745 was changed to double deck cars.

Quoting from an article in a 1906 issue of the Street Railway Journal:

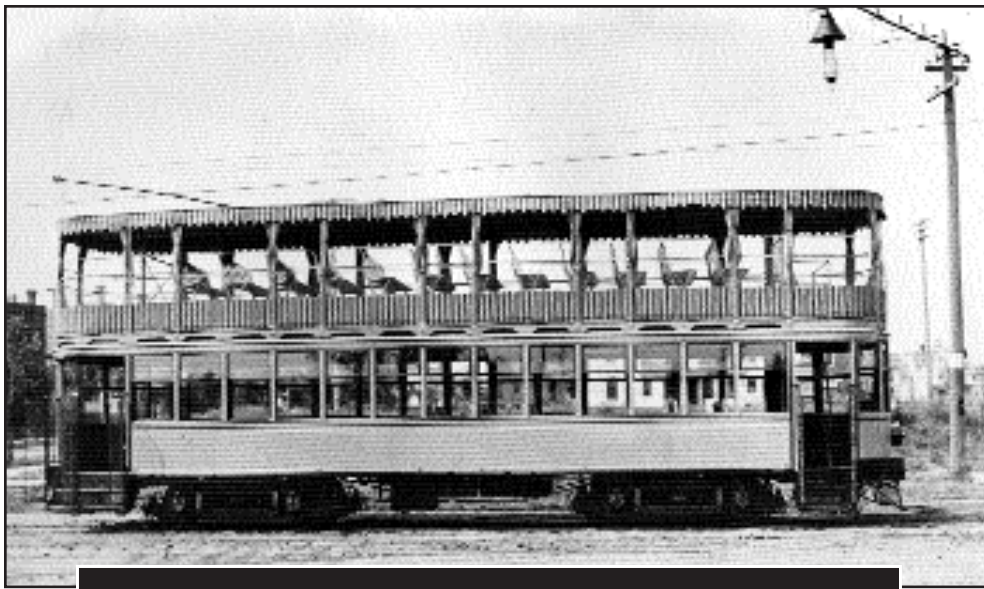
"The company is now constructing 30 double-deck cars...for service on the interurban line to Lake Minnetonka, on which during the summer months the traffic is extremely heavy (The 30 cars would be 1146-1165, 1186-1195). The cars are being built in the shops of the company under the immediate supervision of W. J. Smith, master mechanic of the system. As with the previous car of this type, the upper deck is so constructed that it can be removed from the lower portion of the car during the winter when its use is not required, but it is built in a much more substantial manner, its construction being similar to that usually employed in the ordinary closed car. The sides and ends are sheathed in the usual manner up to a

rail corresponding with the arm rest. The side posts contain curtain grooves and pantasote curtains fitting close up to the posts and provided with frequent stiffening rods effectually closing the openings against the entrance of water during a rain storm. The front windows, however, are provided with sash fitted with glass after the manner followed in construction of the lower portion of the car body. Composite wood and steel carlines extend overhead from opposite side posts and form a support for purlines over which the canvas top is stretched.

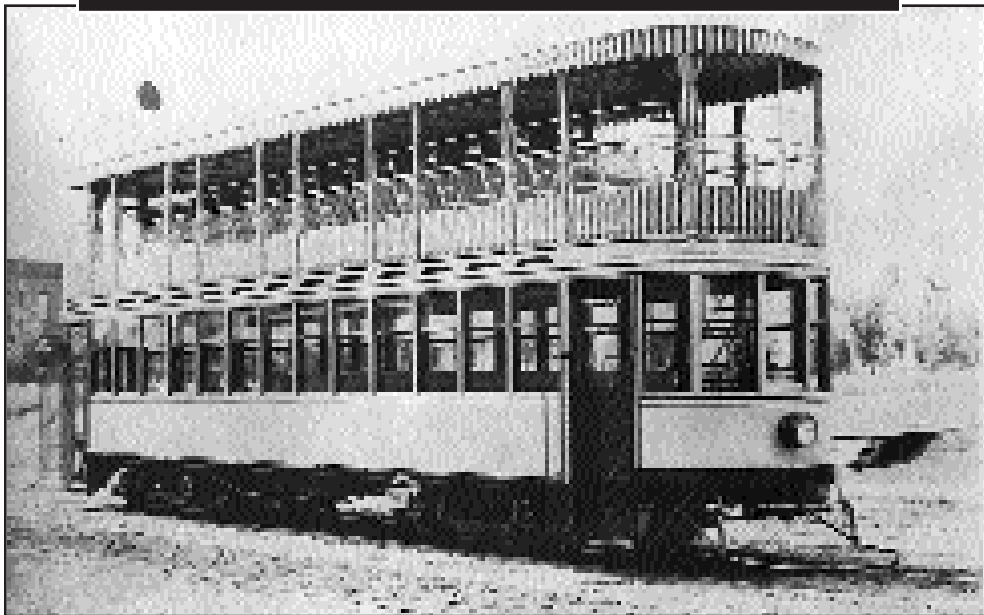
The upper compartment is provided with slat seats running crosswise of the car and resting directly on the roof of the lower portion, which is provided with a grass carpet. The seats, however, do not extend the full width of the car, but space is reserved on one side for an aisle. The second deck is well lighted by lamps placed over each window opening just above the curtain, and other lamps supported by carlines in the front and rear. The upper deck seats 65 people (13 five-passenger benches).

One of the illustrations shows the front stairway over the front vestibule, by means of which access is gained to the upper portion of the car. (The front gates on the stairway entrance were controlled by the motorman.) No stairway is provided in the rear, the idea being that the motorman will observe people passing to the upper deck, while the conductor will take care of those in the lower portion of the car. Just in front of the stairway and immediately over the motorman's cab is a comparatively large space which will be utilized for the storage of baggage and lunch baskets of the picnic parties.

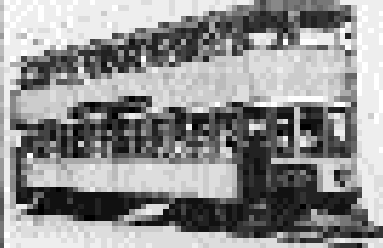
The upper deck adds about 5000 pounds to the weight of the car, while the height of the car with the second story added is 16 feet 8 inches. As the trolley wire is placed 20 feet above the



These are official publicity portraits of #1092 after it received its upper deck canopy and side curtains. Although it was probably not used in regular Lake Minnetonka service, the bottom shot was used to illustrate the advertisement at right. It was doctored to show passengers, exterior signs and higher upper deck side canvas.



TAKE NEW 'DOUBLEDECKER' TO LAKE MINNETONKA



LATEST, NEWEST, UP-TO-DATE.
FINEST CAR IN ALL AMERICA

Great Way to Enjoy Great
Trip to a Great Lake

Leave Minneapolis, April and June 1st, 1906, for LAKE MINNETONKA
and BIG ISLAND PARK at 8:45 a.m. and return from Lake Minnetonka 10:45 a.m.

track there is a clearance of 3 feet 4 inches between the trolley wire and the roof of the car. The ordinary type of trolley pole will be used.

To provide for the addition of the upper deck and the load on the roof the body framing was built somewhat heavier than otherwise. The width of the corner posts was increased and the roof carlines were reinforced, so that with the full load on the upper deck the deflection by actual test does not exceed 1/16 inch. At every post the wood carlines are reinforced by steel carlines. In the forward portion of the car, where the presence of the (destination) sign necessitates an extra width of upper window, the steel carlines are 1 inch by 2 7/8 inches."

Double deck car 1145 was placed on the 20-mile run to Lake Minnetonka from Minneapolis which was advertised extensively by the company. This occurred during the summer of 1906 when construction crews were hard at work double-tracking the Lake Minnetonka line, building dock facilities at the lake for the newly-built steamboats launched in May, as well as constructing Big Island Park.

Meanwhile the car building program was being completed. In August 1906 the description of S.W.O. 8745 (cars

1146-1165) and S.W.O. 8759 (cars 1186-1195) was changed back to standard carbodies. Completion dates were: 1146-1165 May 21, 1906 thru July 3, 1906; cars 1166-1185 June 30, 1906 thru August 14, 1906; and cars 1186-1195 August 11, 1906 thru August 14, 1906.

However, during August 1906 expenditures were charged against new S.W.O. 3379 entitled "Equip Car 1146 With Double Deck". The next month the description was changed to read "Equip One Car With Double Deck". Only small dollar amounts were charged against this S.W.O. A 1906 photograph has appeared of car 1160 at 31st Street Station with the 1904-style open upper deck (see pages 8-9). It appears that the upper deck, minus the canvas canopy roof and side screens, was bodily transferred from 1092 to 1160, plus some minor modifications. Car 1160 was equipped with Baldwin #3 trucks, GE 87 motors (60 hp each) and GE type M control, suitable for fast service on the Lake Minnetonka line. Perhaps this was intended as an experiment to compare the two styles of upper deck.

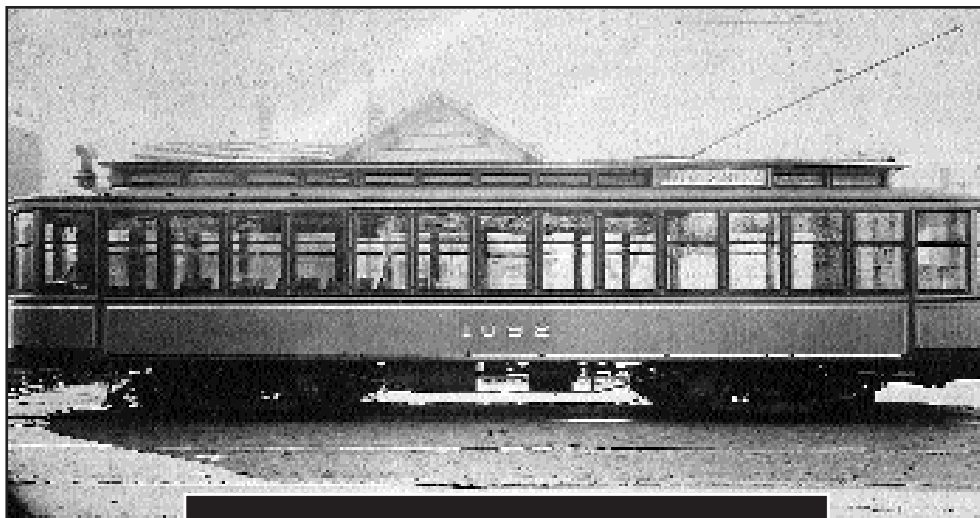
The Minneapolis Tribune ran articles about the double deckers before the Lake Minnetonka line opened, but no articles appear after that time. In 1908

there is a newspaper reference to the double deckers being a failed experiment.

Everett Jones worked for TCRT at 31st Street Station during the double deck period. His photo collection is now part of the MSM archive, and includes photos of cars 1145 and 1160. His hand-written caption on the 1145 photo says "used very little". The 1160 photo says "First double decker". Given the reality of #1092, that seems incorrect.

The author of a 1912 Electric Railway Journal reported, "It was found that people were timid about riding on the upper deck too near the trolley wire, and it will be seen from the accompanying illustrations that the two decks were completely separate, as access and egress to the upper deck was only to be had by the front stairway, which ran direct to the ground. One great objection was apparently the exposure of the upper deck passengers to occasional showers. When rain came everyone wanted to get into the shelter of lower deck (which would have required stopping the car so they could unload, walk to the rear gates and reenter). After about three weeks of this service (summer 1906 on the Lake Minnetonka line) both cars (1145 and 1160) were taken off the road and reconverted to single deck cars, the management deciding that the double-deck principle was not suitable to conditions existing in the Twin Cities."

The author of a 1943 article in an electric railway publication stated that "during the summer of 1907 both double-deck cars were again used on the Lake Minnetonka line. Fears arose that the cars were top-heavy as most of the passengers wanted to ride upstairs. The heavy weight increased wear on the track and overhead requiring extra maintenance. Trolley wire had to be raised which in turn created problems for the standard cars. The difficulty



Car 1092 with the upper deck removed. Note the upper deck mounting brackets along the edge of the roof.

and expense of maintaining the line for passage of both standard and double-deck cars soon brought the experiment to an end."

Neither of these articles mention another obvious problem with the double-deckers—they were much too tall to fit into the shop unless the upper deck was removed. That couldn't have pleased the Mechanical Department.

How much of the information in the 1943 article is factual is uncertain. Company brochures and records give no hint of 1907 operation double-deck cars. The 1912 article previously quoted together with S.W.O. descriptions indicate that TCRT management had decided against building more double-deck cars. Mechanical Department records give no clues as to when each car was

permanently reconverted to single-deck. These records provide only repainting dates. All three cars continued in service as standard cars. 1092 was sold for scrap in 1936, while 1145 and 1160 were dismantled and burned in 1938.



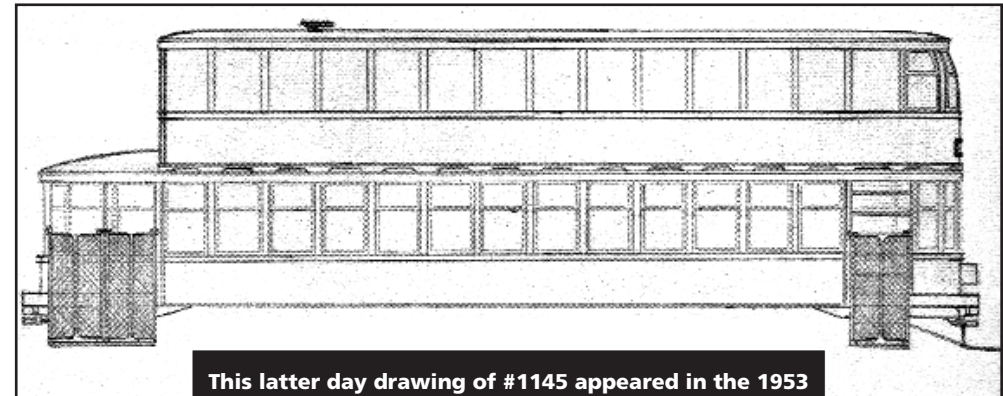
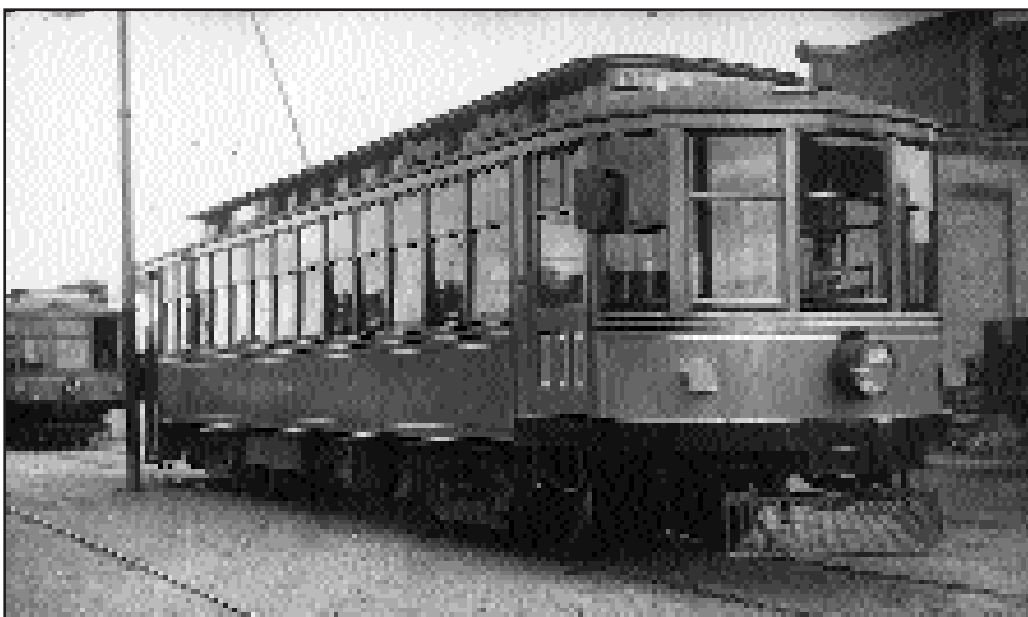
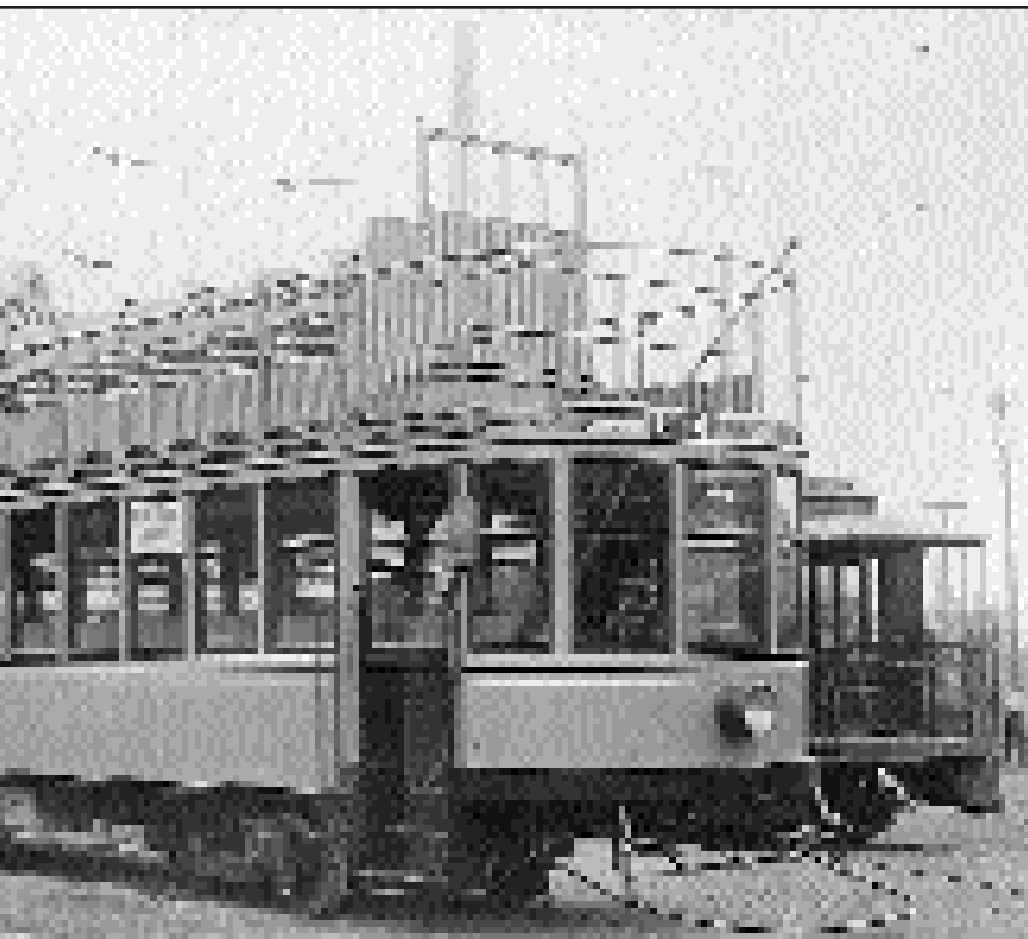
Car 1145 in the 31st Street Station yard, probably in 1906. Note that only the front windows have glass. Pull-down shade offer weather protection in all the other windows. The hand written caption by Everett Jones says "Double deck Lake Minnetonka car used very little."



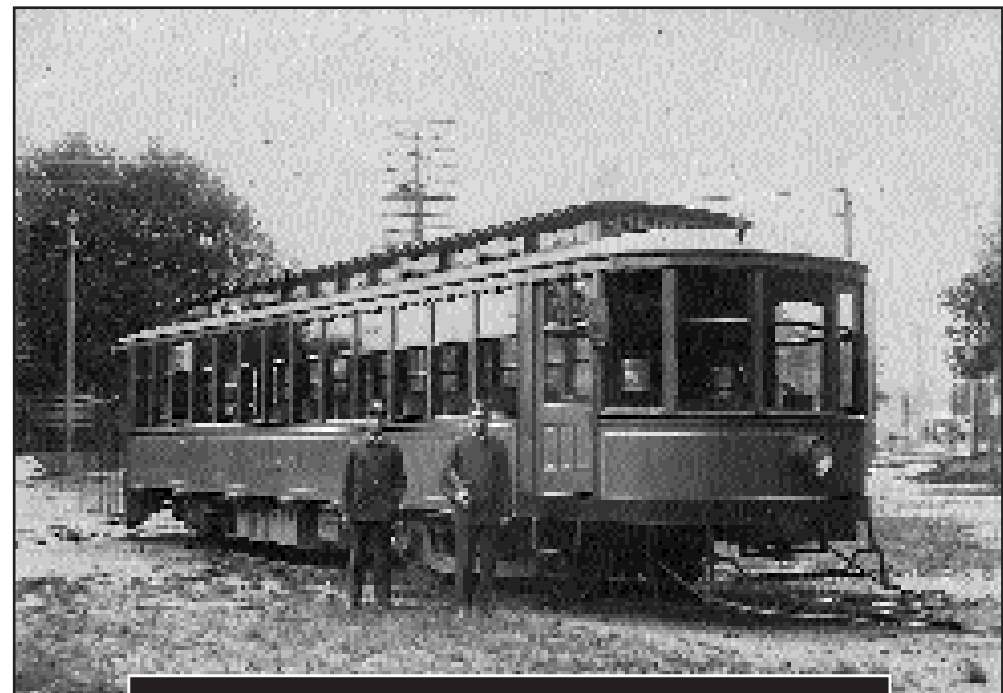
This oft-published 1906 photo is the only one that show car 1145 in service, at 2nd and Water Streets in Excelsior



This is the only known photo of the third double decker, car 1160. It appears to be carrying the upper deck from car 1092, minus the protective canopy and side curtains



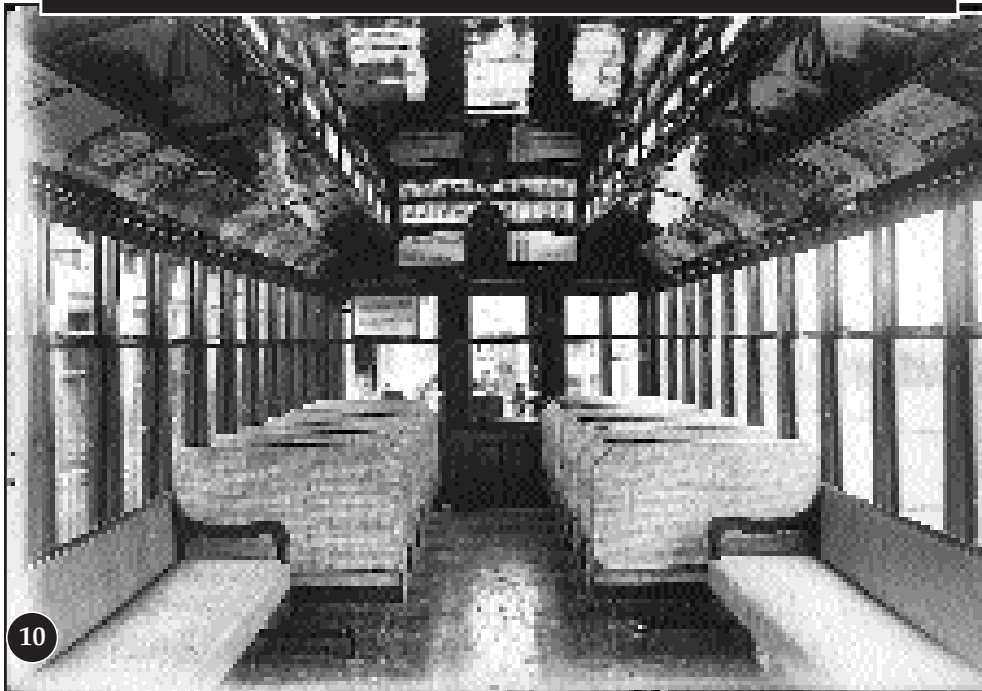
This latter day drawing of #1145 appeared in the 1953 Interurbans #14, the first extensive writeup of TCRT.



The 50 cars built with reinforced structures to accommodate a second deck ended up in two service groups. Left: Cars 1145-1163 became high-speed suburbans, assigned to the Lake Minnetonka and Stillwater lines. Above: Cars 1164-1195 ran in regular city service and lacked the large motors and other distinctive high-speed features.



Compare the thickness of the window posts in car 1159 (top), built for double decking, with car 1573, built several years later. By the way, guess which employee is the conductor and which is the motorman. The conductor is at left. Compare the number of pockets in their coats. Conductors needed more on-body storage. Also, conductors were assigned even badge numbers, motormen odd numbers.



NOTICE TO TRAINMEN

-Aaron Isaacs

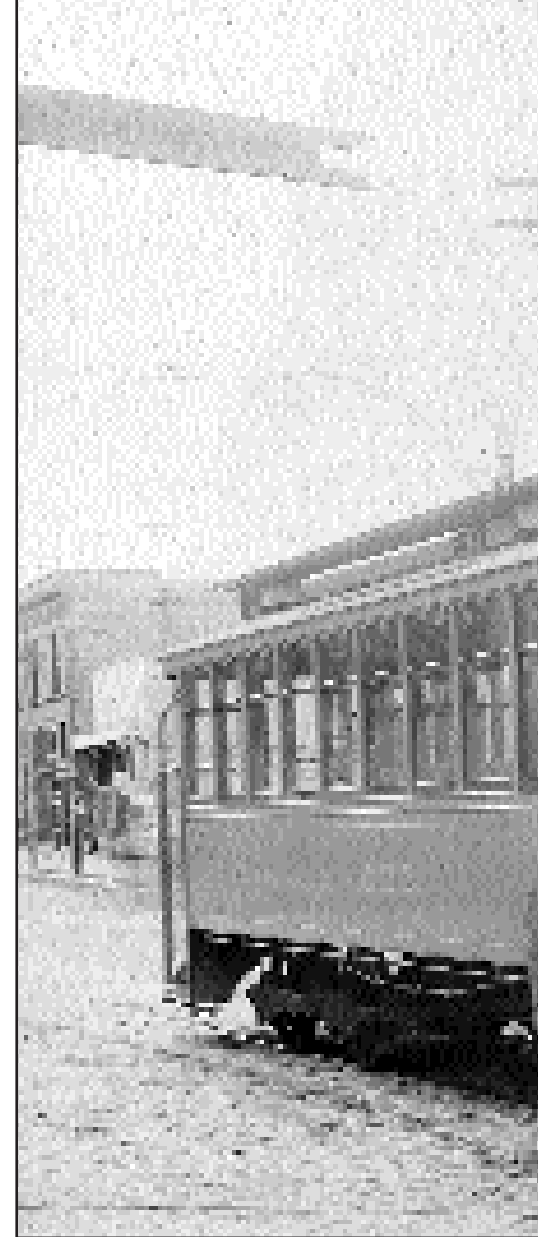
Authoritarian management was the fashion in the early decades of the 20th Century, and TCRT was typical. Its rulebook dictated employee behavior for every occasion, or so it seemed. In reality, exceptions and special cases abounded. Management was forever finding new situations that called for clarification of the rules, or creation of new rules. The answer was to issue a Notice to Trainmen, more commonly called a Bulletin, a memo that described the problem and directed a solution. Most bulletins concerned mundane operating details—a stop relocated, a slow order at a high-accident location, a clarification of fare procedures. The bulletins give a good idea of the many small operational details involved in running streetcars.

Many bulletins, when read together, reveal a cat and mouse game between employees who either bent or violated the rules and the managers who tried to bring them into line. Reading them, it's easy to see why employees became disgruntled and organized unions. On the other hand, the language often shows management's frustration at the numerous ways employees found to circumvent the rules or show incompetence. What follows is a sample of bulletins from the early 1900s, collected in a scrapbook by the late Gene Corbey. Capitalization and underlining are as they appear in the actual bulletins. I've added explanatory comments in italics.

March 7, 1905

Prior to this time, streetcars had no rear view mirrors. The motorman controlled the gates and not being able to see them caused accidents. The mirrors were intended to prevent that.

The mirrors now being placed on the front vestibule of cars will enable the motormen to plainly see the gates,

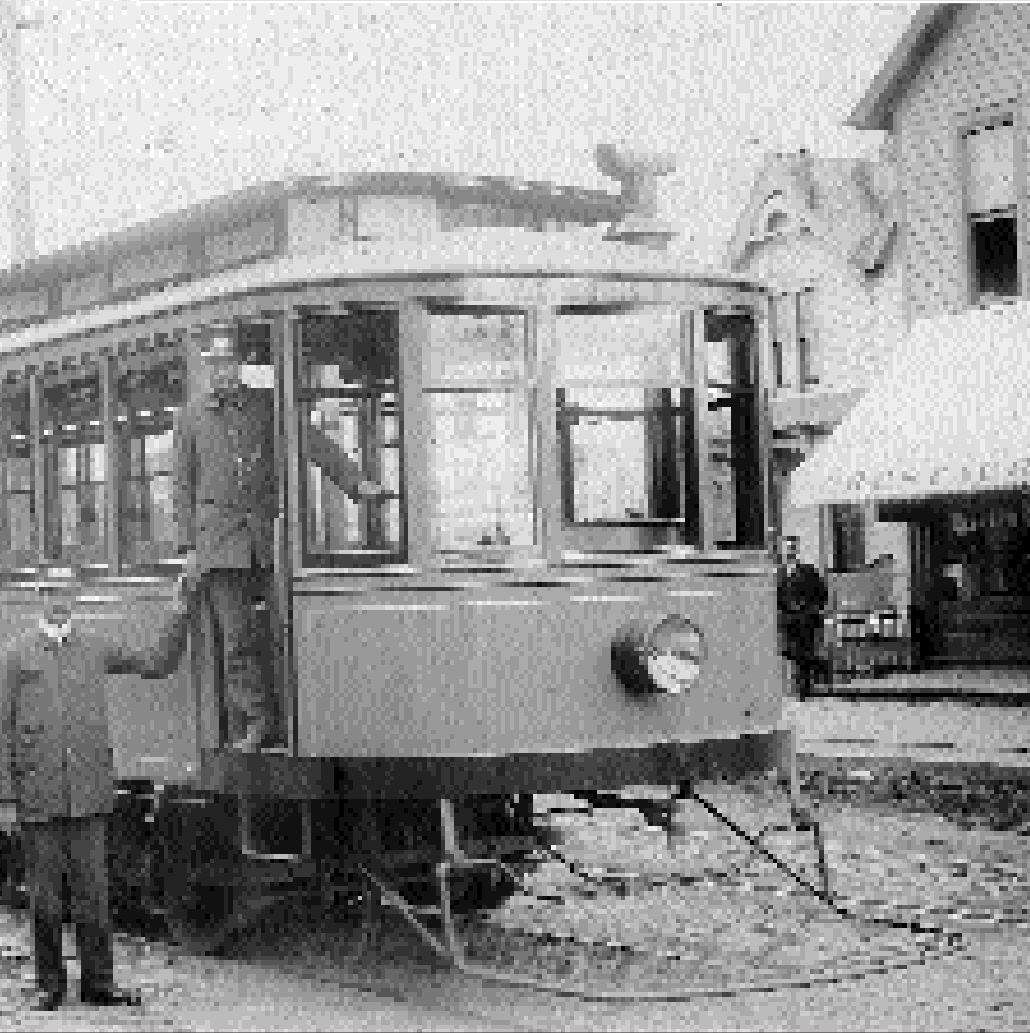


before closing them he should be sure they are clear. Gates must not be closed until "go-ahead" signal has been given on the conductor's bell.

March 13, 1905

Conductors will see that all transfer envelopes are carefully sealed so as to prevent transfers from coming out before turning the envelopes in.

Before 1905, TCRT streetcars had no rear view mirrors, which undoubtedly resulted in rear gate accidents, since the gate was controlled by the motorman. Car 877, riding on its early Bemis trucks, is somewhere on West 7th Street in St. Paul, headed for Fort Snelling. Car 769, equipped with a mirror (and an interesting headlight), appears to be near the end of the Inver Grove line.

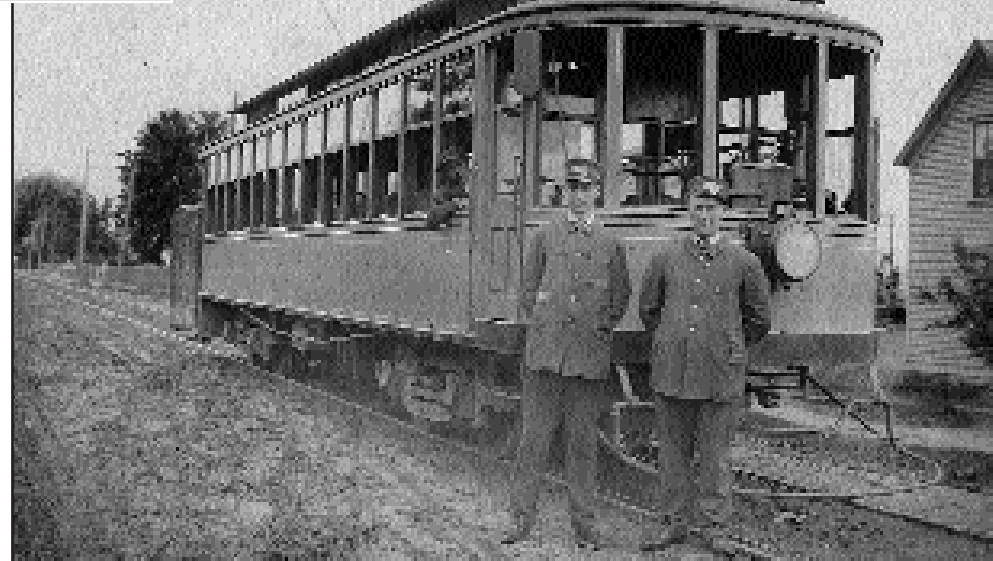


March 31, 1905

All cars carried a broom in the rear vestibule, as 1300 does today. Do not use the broom handle as a switch rod, in doing so the handles are broken and grease collects on them and when put back in the vestibule passengers come in contact with them and ruin their clothes.

April 4, 1905

This refers to the electrical box located in the motorman's compartment. Sitting on the automatic cutout box, beside being dangerous, loosens the apparatus from the body of the car and must be discontinued.



April 4, 1905

Cans of gasoline or other inflammable oil are not to be carried by passengers or for this Company on any car in passenger service.

April 5, 1905

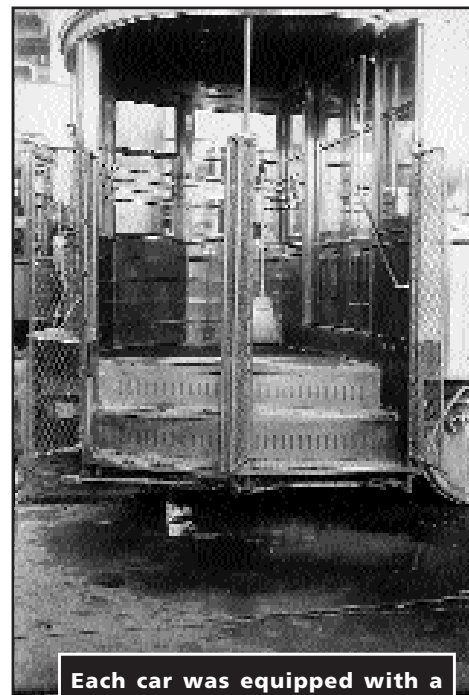
Information relative to time card changes or changes in the time schedule which is placed in the Station in advance of the time it is actually put into effect, must not be discussed or given to passengers or the public in advance.

April 29, 1905

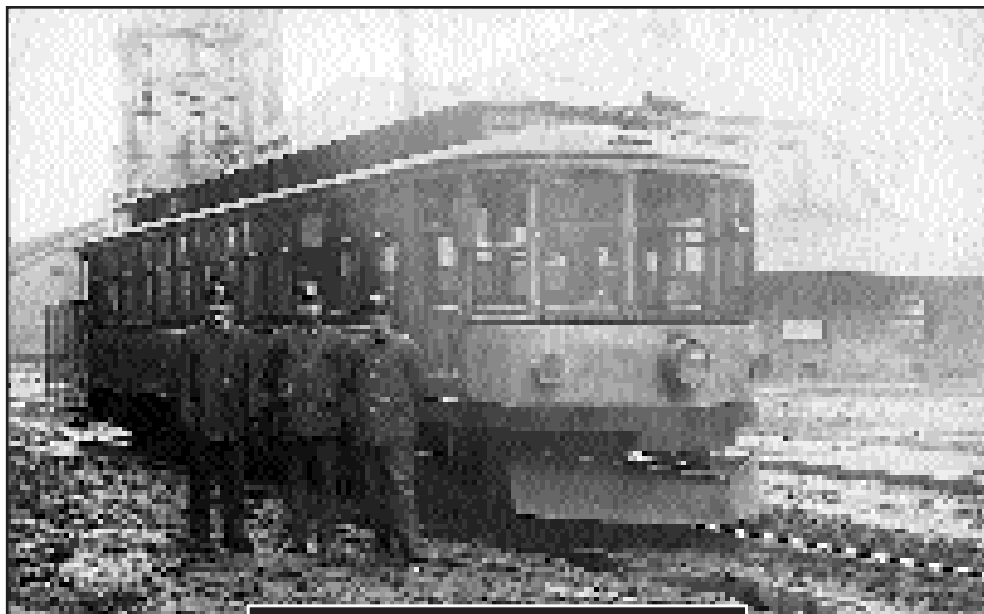
Trainmen assigned to work on work cars must wear uniform cap and badge at all times when on duty.

June 6, 1905

Attention is again called to the rule relating to stopping cars to receive and discharge passengers in dangerous locations. There is positively no excuse for doing so. ALL CARS MUST BE STOPPED WITH THE GATES IN A SAFE



Each car was equipped with a rear vestibule broom and a switch rod. Guess which one was used to turn a switch, much to management's displeasure?



Trainmen, presumably in newly purchased uniforms, at the Stillwater Union Depot



The motorman's door properly closed

PLACE FOR PASSENGERS TO BOARD AND LEAVE THE CAR; failure to do so will be considered as incompetency on the part of the motorman.

June 16, 1905

During warm weather it is desired to make the cars as cool and inviting as possible to the public. With this in view you will lower all the windows in the car, shades should be drawn partly down on the sunny side during the day. In the evening all shades should be pushed up to the top.

June 22, 1905

Stillwater Division

Stopping with the rear gates in the best spot for passenger boarding was a challenge.

Stone markers painted white have been placed at all of the crossings on the dirt streets. These markers should enable you to stop with the gates in the crosswalks. 44 foot cars should be stopped with the front of the fender on the marker, the 37 foot cars with fender five feet away. Watch this and comply.

July 18, 1905

ALL CARS MUST BE RUN OVER CROSSINGS AND SWITCH WORK AT REDUCED SPEED. The practice of throwing on full current while crossing intersections and switches must be stopped now. This is injurious to the track and cars and very annoying to the people in the vicinity who are trying to sleep.

July 18, 1905

No gas cans? Guess again.

When carried by an employee of the Track, Electrical or Mechanical Department, with badge properly displayed, permit such employees to carry not to exceed one five gallon can of gasoline in the rear vestibule of cars.

August 11, 1905

There is NO EXCUSE for a gate accident on a car equipped with looking glass and none will be accepted.

August 28, 1905

Stillwater Division

Motormen carrying packages of newspapers will not leave the car to carry them to the sidewalk. Unless some representative of the news depot is there to meet the car on its arrival, Motormen will throw the packages on the sidewalk but MUST NOT LEAVE THE CAR.

November 14, 1905

St. Paul & Stillwater Line

After this date, when because of cold, stormy, windy or disagreeable weather, it is necessary for the comfort of passengers to keep the rear door closed, conductors may stand inside of car AT THE REAR DOOR, excepting between the following points:

BETWEEN 7th & Broadway AND loop and return (traversing downtown St. Paul)

Owen Street Station loop and return (traversing Stillwater local trackage)

It will, however, be necessary for conductors to step outside on the platform at each and every place when passengers are boarding or alighting to give assistance such as is required by former rules and orders.

It is further necessary that conductors be outside attending to trolley AT ALL TIMES when going AROUND CURVES and OVER any and ALL INTERSECTING SWITCH WORK. This was before the installation of trolley pole retrievers.

Also to be on the rear platform at all intersections with other lines watching for passengers who may want their car.

November 16, 1905

St. Paul & Stillwater, Como-Harriet, Minnetonka lines.

After this date windows and doors will be kept closed between the motorman's vestibule and the car body. The only exception to the above will be when nearing the end of the line, trainmen will follow out previous

orders relative to ventilation of the cars, i. e. when within two blocks of the end of the line, front door or window will be opened and car properly ventilated.

December 5, 1905

Your attention is again called to notice issued October 2, 1903, also notice on Page 33, Book Trainmen's Guide, relative to chewing tobacco while operating cars. These notices are being violated repeatedly, and I wish to warn trainmen that the practice of chewing tobacco while on duty on passenger cars is objectionable in every respect and **MUST BE STOPPED AT ONCE.**

December 19, 1905

SOME conductors **IN MANY INSTANCES** are putting transfers and tickets for a round trip into **TWO ENVELOPES** instead of one. It is imperative that all transfers and tickets for any full trip be turned in **ONE ENVELOPE**, excepting in extreme cases where it is found impossible to get all transfers and tickets into one envelope when two envelopes may be used.

January 5, 1906

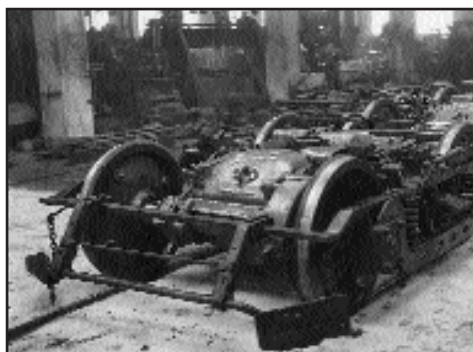
TRAINMEN—STILLWATER INTERURBAN LINE

Jacob Kelliner, Stillwater, will again make the coming year's uniforms and is now ready to take **ORDERS and MEASUREMENTS.** Orders for uniforms may be obtained from the Station Foreman and should be placed with Jacob Kelliner at **AS EARLY A DATE** as possible in order that **ALL TRAINMEN** may be provided with a uniform before April 1st next. Payments should be made directly to Jacob Kelliner as no deductions will be made from pay checks.

Trousers.....\$4.50

Coat.....\$9.50

Trainmen's pay was 22 cents per hour, so a uniform purchase represented 63.6 hours of work.



**Snow scrapers mounted
on the front of a truck**

January 11, 1906

Complaint is made that some motormen allow sand to run in going over switches and frogs. This practice is injurious to switch-work and **MUST BE STOPPED AT ONCE.** In going over frogs and switches, scrapers (ice scrapers mounted on the front truck ahead of the two lead wheels) must **ALWAYS** be raised and kept in that position until car has passed over switch-work.

February 14, 1906

This was the five percent former cable car grade.

The rate of speed west bound on Seventh Street hill must not exceed eight miles per hour.

March 14, 1906

THE PRACTICE OF HOLDING ON TO REGISTER CORD WHILE COLLECTING FARES MUST BE STOPPED. Holding the tension in register springs is injurious to the registers and is entirely unnecessary. Release the tension fully after registering fares.

March 27, 1906

Before this, the motorman's compartment had no seat, so they stood the entire time on duty.

St. Paul & Stillwater, White Bear, Como-Harriet, Minnetonka Lines. Commencing March 29th, seats for use of motormen will be placed in

vestibule and may be used between the following points, and when not in use, must be placed in socket at the side:

St. Paul & Stillwater:

Owen St. Station to 7th St. Station

White Bear & Mahtomedi:

Mahtomedi to Cottage Park Road

Como-Harriet:

Rice & Como to 15th & Como.

Franklin Avenue. to Harriet

Minnetonka:

Harriet Loop to Excelsior Sub Station

Motormen must rise and remain standing on approaching **INTERSECTING LINES—R.R. CROSSINGS** or other dangerous points on lines. At all passenger stops, motormen must rise and make use of mirror to avoid accidents. Motormen must exercise good judgment in using seats between above points and not make use of them on trips where travel is heavy and there is difficulty making running time, or at such times as street may be congested within above limits.

April 23, 1906

Some motormen are paying very little attention to rules regarding the ringing of gong at Street Crossings and when passing cars, teams, etc., and at all points where necessary to attract attention to the approach of the car. Instructions respecting above have been incorporated in "Trainmen's Guide" also have bulletined from time to time and there can be no good reason why they should be disregarded.

May 16, 1906

Hereafter transfer punches that are broken or bent by prying up windows will be charged up to the man causing the damage.

June 15, 1906

Motormen **MUST** keep door between motorman's cab and carbody closed.

July 11, 1906

Then again...

During the warm weather motormen may keep door between vestibule and body of the car open; but under no

circumstances will outside door leading into motorman's cab be left open.

July 11, 1906

The practice of conductors sitting down while on duty will be discontinued at once, also the tipping up of rear cane seat in cross-seat cars and sitting on edge of seat will be discontinued.

July 13, 1906

In many instances motormen are abusing the seat privilege by occupying the same in districts not specified in the rules, also not getting up when receiving or discharging passengers. Motormen are requested to use the seats only in the manner and in the territory prescribed by former bulletins and not make it necessary to resort to measures more extreme.

June 19, 1906

Trainmen will not be permitted to smoke while on duty, nor will they be allowed to smoke on cars when riding as free riders.

July 25, 1906

Motormen must discontinue changing signs while car is in motion. Signs must be set while car is standing.

August 5, 1906

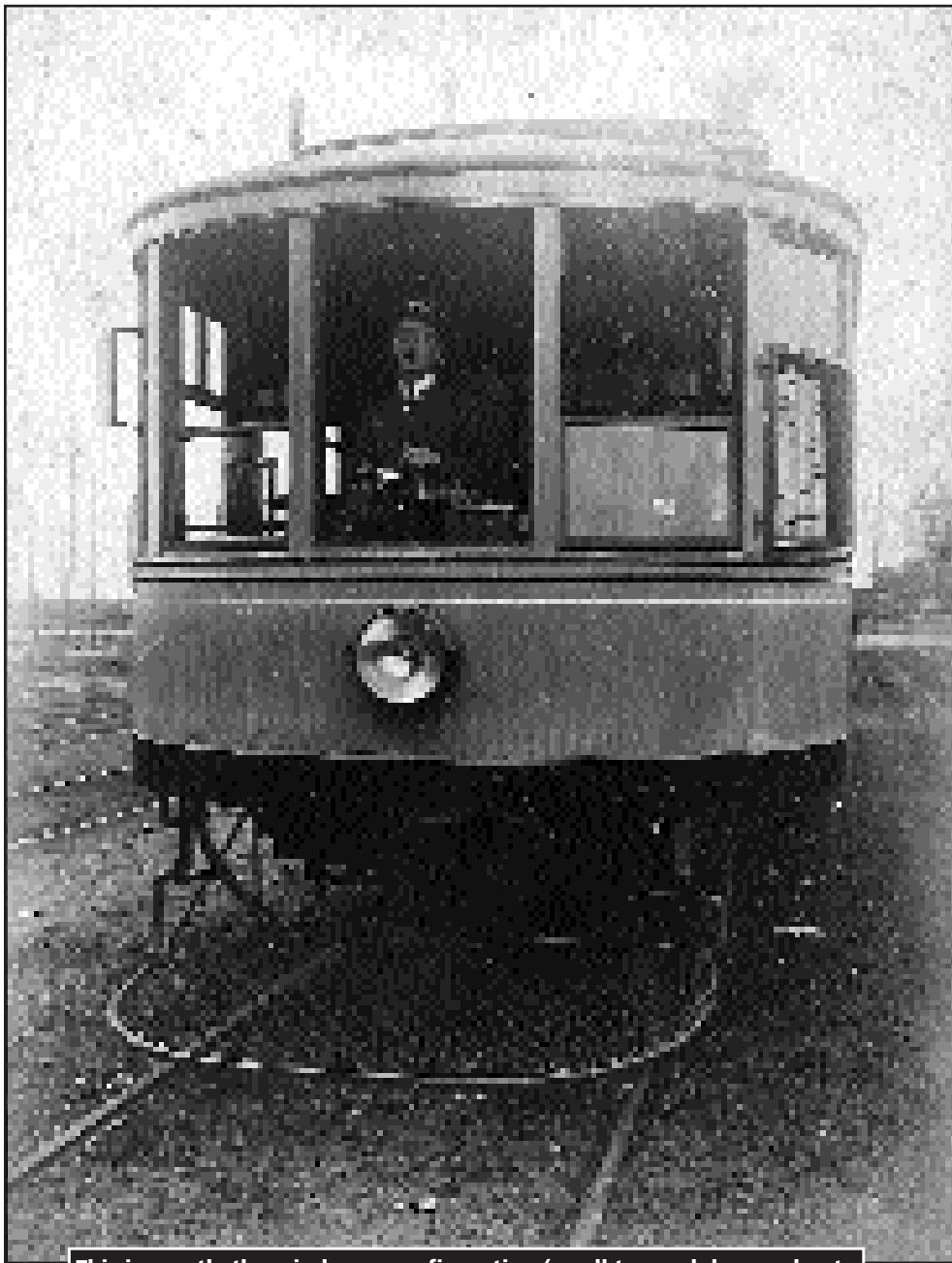
Hereafter all trainmen keep their coats on while on duty on the car.

August 9, 1906

St. Paul & Stillwater Line
Motormen will under no circumstances blow whistle or in any other way indicate to local cars that they are to sidetrack in order to give Stillwater the right of way.

September 20, 1906

Complaint is made that quite a number of fenders and car steps are being damaged by steps catching or becoming locked with fender because of running cars too close together. Trainmen **MUST** keep cars apart and **NEVER** approach car ahead nearer than **FIVE FEET.**



This is exactly the window reconfiguration (small top sash lowered onto the sill) that the bulletin prohibited. Better ventilation was the goal.

October 2, 1906

During layover at the end of the line only one of the trainmen is to leave the car at a time, and IN NO CASE ARE BOTH MEN TO LEAVE THE CAR ALONE. Also the practice of going into saloon at the end of the line will be discontinued.

October 5, 1906

Como-Harriet-Hopkins

When water has reached 18 inches in depth under the 15th Avenue SE viaduct owing to a heavy rain storm, motorman will NOT attempt to run car under the bridge until he has telephoned to the East Side Station and received orders to proceed.

November 5, 1906

Many of the windows were removable, and this was probably how motorman increased ventilation in the cab. The window was blocked in place with a piece of coal from the stove, which was located behind the motorman in the front vestibule.

Motormen will not invert windows in cab, block them with coal as is generally being done at present. The

larger sash is to be left at the bottom and the smaller one at the top as originally intended.

November 19, 1906

This probably has to do with fumes from the coal stove.

STREET CAR MUST BE PROPERLY VENTILATED AT BOTH ENDS OF THE LINE in the following manner:

When within two blocks of the end of the line, the conductor will let down the middle sash leading to the motorman's cab. Motorman will open the vestibule door and the conductor the rear door thus giving a direct draught through the car. The ventilators should also be open. Should there be any passengers on the car who object to the draught when the car is running, you will attend to the ventilation while the car is "Y-ing" at the end of the line during layover. Good judgment must be used in extreme cold weather, as at such times it may not be necessary to leave the car open so long a time as when milder weather prevails. It is **ABSOLUTELY NECESSARY** that all



The 15th Avenue SE underpass on the Como-Harriet line. Edwin Nelson photo.

cars receive a thorough airing at points mentioned above, and that the ventilation be so arranged that cars have good air at all times.

November 23, 1906

During the cold weather, the steps and rear platform become very slippery with snow and ice being tracked in by passengers. It is imperative that every effort be made to keep them clean using broom as often as necessary during trips, and a thorough cleaning should be given at each end of the line.

December 13, 1906

The Company acknowledges the existence of Christmas.

Taking effect today the following will be in force—

You will permit the carrying of large packages, Christmas presents, etc. on your car. This order expires January 1, 1907.

December 14, 1906

The cars always had window glass, not safety glass, and breakage was a problem. Motormen will be careful in starting and stopping car to avoid the numerous reports of passengers being thrown again windows. Conductors will use care in raising and lowering windows to avoid breaking them.

December 18, 1906

EFFECTIVE TODAY—From one (1) to four (4) bundles of newspapers will be carried in the motorman's vestibule. Bundles never in excess of four (4) are to be carried at any one time and all four bundles are not to contain approximately more than three hundred (300) papers all told. After a motorman has received his quota of papers he will politely inform the newspaper representative that he cannot take additional bundles, but that they may be placed on the following car. Motormen are requested to exercise great care in the delivery of these papers and never carry them beyond their destination as indicated on the different bundles.

December 26, 1906

Ashes accumulating in Baker Heaters will NOT be emptied during the day at any time on the line, nor be dumped in coal hod on pullin trips, but are to REMAIN IN ASH PIT AND TAKEN OUT AT STATION.

December 29, 1906

The practice of using oiled waste on the master controller fingers must be stopped at once. Motormen will promptly report any defect in the operation of controller to Station Foreman and allow shop men to remedy it.

Controller contacts were normally lubricated with Vaseline, which could withstand much of the arcing at the contacts. It also tended to maintain a lubricating coating on the surfaces of the finger contacts and drum segments. Oil would not maintain that lubricating film,



A controller with the front cover off revealing the rotating drum with "finger" contacts.

and dry contacts are more prone to arcing, as well as increased wear. There is also the hazard of shards from the cotton waste being shed upon the contacts, leaving oily remnants that could catch fire quite easily. In addition, those shards could prevent proper contact between the fingers and the segments, possibly exacerbating the arcing problem.

December 31, 1906

Some issues never go away. This very subject appeared in one of Jim Vaitkunas' recent operations newsletters. Metro Transit began requiring the folding of strollers on buses a few years ago.

Perambulators when closely folded BEFORE passenger boards car will be allowed, but must be taken inside car and not left on rear platform.

January 11, 1907

The practice of conductors sitting down at any point on the line excepting at layovers will be discontinued. Conductors will not talk to motormen except when absolutely necessary and then make their conversation as short as possible. Motormen will not call conductors to the front end of the car unless it is absolutely necessary to speak to them about some operating condition.

January 16, 1907

During the meeting of the Northwestern Cement Producers Association at the New Armory Hall, St. Paul, January 16-18, conductors on the Selby-Lake line will announce: "FOURTH & EXCHANGE STREETS" "THREE BLOCKS NORTH TO CEMENT SHOW".

January 18, 1907

Conductors are absolutely forbidden to place gloves, newspapers or umbrellas, or other articles in the advertising racks or in any other place that will in any way obstruct a view of the advertising matter.

February 19, 1907

Periodically management really became exasperated and tried to lay down the law, with mixed results.

Instances are continually arising which plainly signify that TRAINMEN ARE NOT READING BULLETINS. This is a serious offense and hereafter prompt action will be taken in each case where trainmen are found negligent in this matter. Station foremen will be responsible for their men reading this order, so that there may be no excuse for failure to comply.

March 5, 1907

After this date, trainmen will not accept and deliver packages pertaining to other than this company's business. Packages addressed to Sub Stations, Docks or Big Island will be accepted.

March 6, 1907

Selby-Lake Line

A Western Union clock has been placed in front window of Selby Station. Trainmen are expected to compare their watches frequently with this clock. Cars should be run exactly on their time and no excuse will be taken for running ahead of time.

April 5, 1907

Selby-Lake Line

In flagging the Milwaukee crossing, trainmen will be governed by the following:

Conductors will proceed across all the tracks before giving motorman signal to come ahead. Motormen will, under no circumstances, start car until conductor has crossed all of the tracks and given proper signal to come ahead. After crossing railroad tracks, motormen will not bring their cars to a stop and open gates to take on conductors until car has cleared the crossing gates so that these may be lowered immediately by the flagman.



The Milwaukee Road crossing of Lake Street, just east of Hiawatha Avenue

April 9, 1907

TRAINMEN WITH BADGE AND UNIFORM ON ARE FORBIDDEN TO ENTER SALOONS.

June 8, 1907

Plugging the "M" control disabled the deadman feature.

Complaints have been made by the Mechanical Department that motormen are plugging "M" control and filing off notches on the air valve, changing the automatic and doing various other things to the operating machinery of the cars. THIS MUST BE STOPPED AT ONCE. Motormen having cause to report any defective equipment will do so when the car is pulled in on regular book provided for that purpose and not endeavor to correct such troubles by mutilating the equipment.

June 8, 1907

Since notice was withdrawn requiring the payment of a dollar by trainmen for broken windows, there has been an increase in the number of windows broken. This is due to a considerable extent to the carelessness of trainmen either allowing cab doors to blow to,

dropping windows or pushing elbows through windows. After this date, windows broken owing to carelessness of trainmen will be charged against them.

June 24, 1907

Numerous complaints have been made recently where conductors have informed passengers that they could get a Minnetonka, Deephaven or Stillwater car after the last cars have left on above lines; conductors will familiarize themselves with the above in order to be able to answer questions accurately.

June 28, 1907

Carrying passengers got in the way of running an efficient railroad.

A great many unnecessary delays and loss of time in the operation of cars is due to the slow progress of people, both in boarding and alighting from cars. This applies particularly at transfer points and other places where there is a congestion of traffic. Conductors could facilitate matters by the frequent use, in a polite way, of "Step lively please."

July 8, 1907

Thru the switch rod hole?

Minnetonka line conductors are particularly cautioned to keep their reserve supply of receipts in a safe place in the Motorman's cab where they cannot be stolen or lost thru the switch-rod hole.

July 13, 1907

It is positively essential that the trip sheets used on a run be signed by BOTH THE CONDUCTOR AND MOTORMAN in the space provided for this purpose. The Motorman must PERSONALLY WRITE his name and number and never permit the Conductor to do this for him.

July 16, 1907

There have been numerous delays caused by motormen not immediately checking the speed of cars when trolleys leave the wire, motormen relying on the conductor or the trolley-catcher preventing damage to overhead construction. In some instances trolley and span wires have been pulled down causing bad delays.

Motormen must reduce speed of car, coming to a stop as quickly as possible, to avoid damage to the overhead construction.

July 22, 1907

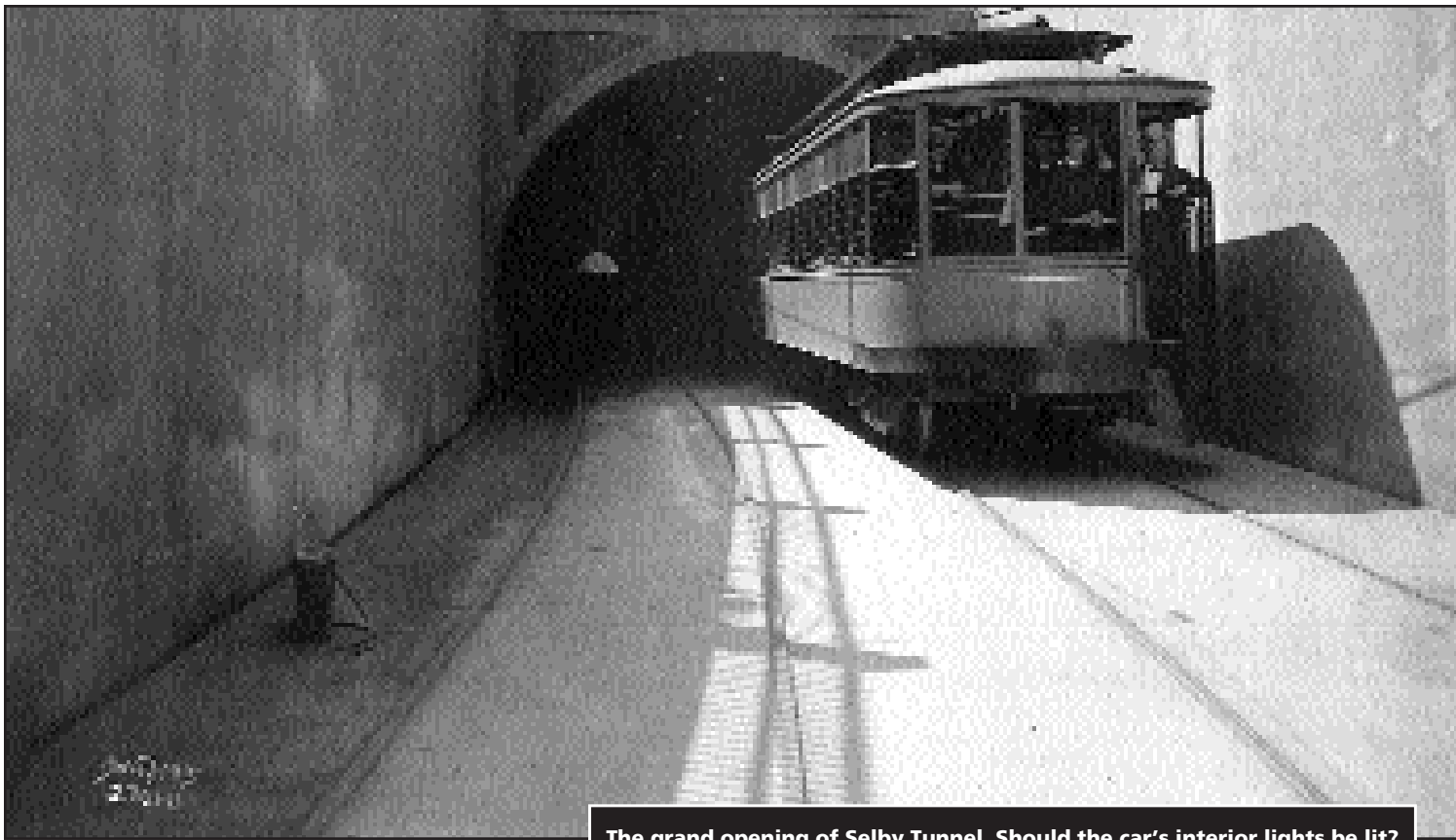
Your attention is again called to the fact that under no circumstances will any person, except someone in authority, be permitted in the motorman's vestibule.

July 23, 1907

It is of the greatest importance that the cross-over on University Avenue at Snelling Station and also the one just west of Snelling be closed, that is, set for the main line at all times. Both conductor and motorman of any pull-in cars using these cross-overs will be held strictly accountable for the closing of these switches. Should there be more than one car at the same time to pull through the cross-over it shall be the duty of each conductor to see that the cross-over is closed after his car passes.



The crossover at Snelling and University leading into Snelling Station



The grand opening of Selby Tunnel. Should the car's interior lights be lit?

August 22, 1907

Selby Tunnel

Two cars going in the same directions must not be in the arch of the Selby Subway at the same time.

Speed down the incline must NEVER exceed ten (10) miles per hour. Leaving Subway at the lower end speed must not exceed five (5) miles per hour, and cars must be under FULL CONTROL crossing Pleasant Avenue.

Motormen observing trackmen or others in the Subway will immediately bring car to full control.

During the daytime lights should not be turned on while cars are going through the Subway.

Conductors must invariably remain on back platform holding all slack out of trolley rope so that in case of trolley leaving wire it may be immediately pulled down.

August 27, 1907

From the number of reports and claims being received, it is evident that trainmen are ignoring some of the very first rules of street car operation. Attention is called to special precautionary notice in cover of rule books, as follows:

"Motormen are cautioned to exercise great care when a vehicle is passing alongside of track ahead of car. Ring the gong vigorously to attract the

attention of the person driving, as a warning not to pull ahead of car; and RUN GUARDEDLY until the vehicle is passed in safety.

Always bring the car to a full stop before passing a car that is standing on the opposite track.

GATES ARE TO BE CLOSED AND LOCKED BEFORE THE CAR STARTS, AND ARE NEVER TO BE OPENED UNTIL CAR HAS COME TO A FULL STOP.

Severe action will be taken with trainmen who fail to observe the above, IN ALL DETAIL.

September 5, 1907

Management periodically reversed itself, with no apology or explanation.

LIGHTING CARS THROUGH SELBY SUBWAY

Effective at once, motormen will turn on lights in cars Going East at Nina Avenue and turn them out after crossing Pleasant Avenue. Going West lights should be turned on before crossing Pleasant Avenue and turned out after Nina Avenue. Motormen will be particular to carry out above instructions EXACTLY as directed.

October 1, 1907

The auto emerges as a threat.

HENNEPIN AVENUE LINES

Motormen, when passing the Barclay automobile garage (which is located on the west side of Hennepin Avenue at Harmon Place) must run slowly, having car under perfect control, as this is a very dangerous place owing to the large number of automobiles passing in and out of the garage and those coming down Harmon Place where they run at very high speed.

January 20, 1908

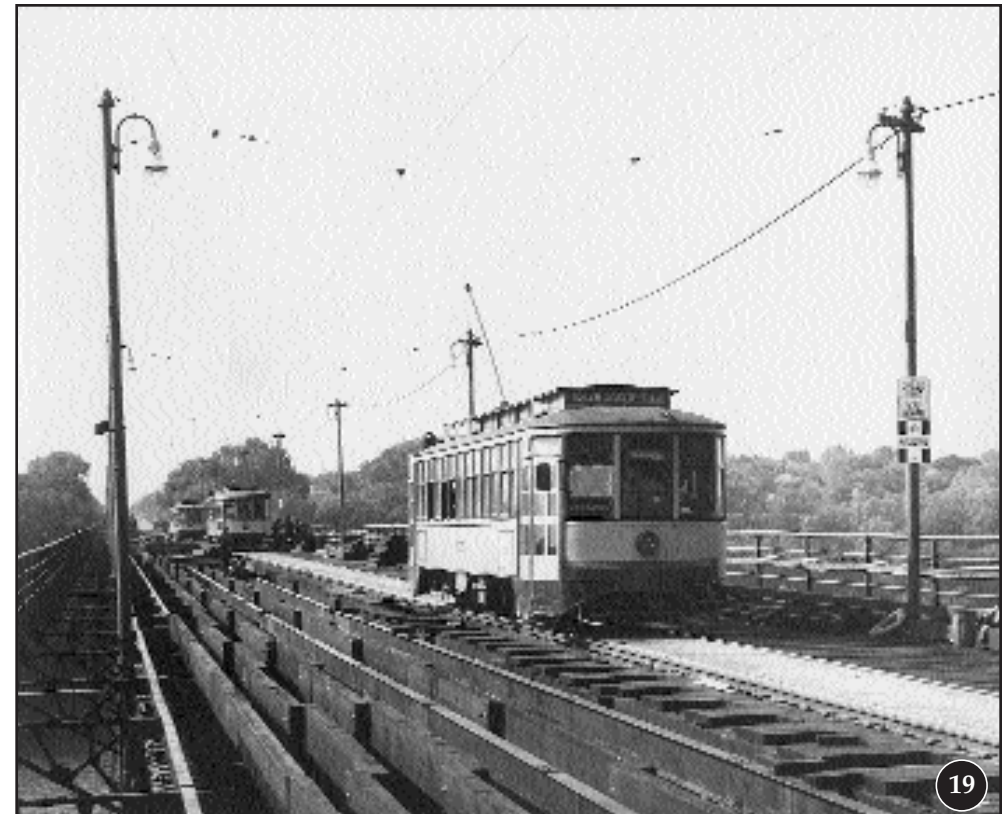
Complaint is made that frequently the advertising cards in the car are defaced or marked up. Trainmen, if they are in the habit of marking or defacing these cards, must stop the practice at once, and must also to the best of their abilities prevent others from committing such a nuisance.

REDECKING THE LAKE STREET BRIDGE

In 1950 the 45-year old Lake Street bridge over the Mississippi River received a new deck. Streetcar service was maintained by removing one track from service, replacing that portion of the deck, and then shifting to the other side. A temporary crossover was installed at the St. Paul end of the bridge.



Two views of the temporary crossover. Above: Minneapolis Star-Tribune, Minnesota Historical Society collection. Opposite top: Barney Olsen photo.



One-track operation gave passengers a view looking down through the open deck at the river. Minneapolis Star-Tribune, Minnesota Historical Society collection and Barney Neuberger photo, Greer Nielsen collection.



The Lake Street bridge during redecking, looking toward the St. Paul end (above), and the barriers at the Minneapolis end. Minneapolis Star-Tribune, Minnesota Historical Society collection



Streetcars were restricted to a single track during the reconstruction of the Lake Street bridge. Both Minneapolis Star-Tribune, Minnesota Historical Society collection.

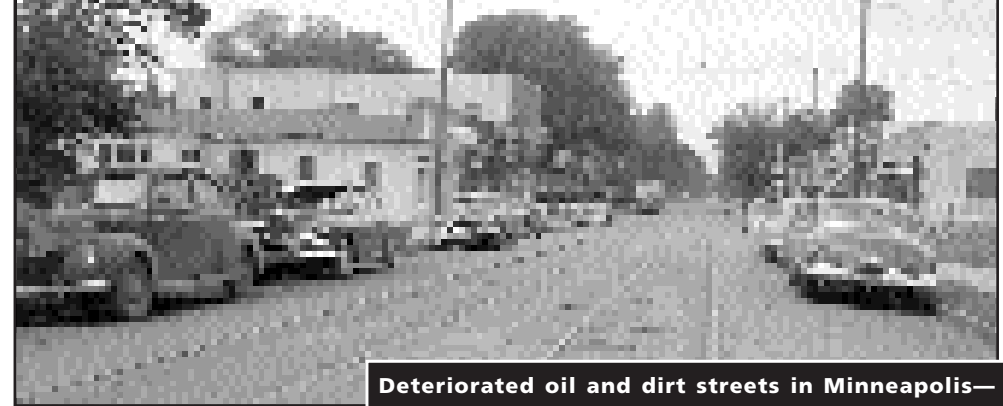


BAD PAVEMENT

The TCRT's city franchises required it to pave and maintain the pavement in the track portion of the street. By 1950, TCRT lacked the money to comply and let the maintenance lapse. Many streets were only oil and compacted dirt, and tended to break up badly during spring thaw. The Minneapolis Star-Tribune documented some of the worst places. On France Avenue, the desire of the City of Edina to fix their side of the street caused them to block the streetcars in 1952 and force abandonment of the line between 44th and 54th Streets. All Minneapolis Star-Tribune photos, Minnesota Historical Society collection.



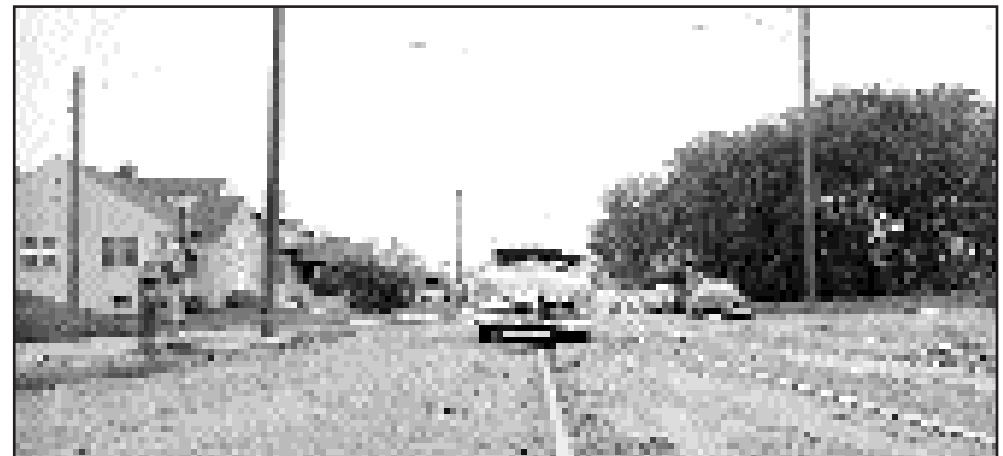
Looking north on Minnehaha Avenue at 22nd Street. Compare the broken pavement between the rails with the city-maintained outside lanes.



Deteriorated oil and dirt streets in Minneapolis—looking north toward 38th Street and Grand Avenue, and looking east on 54th Street from 42nd Avenue S.



Bad pavement on France Avenue S. at 45th Street (right) and 54th Street. That's the wye switch in the foreground. Note the round block signal for the single track on the pole above the nearest parked car.





On August 11, 1952, the City of Edina unilaterally terminated streetcar service on France Avenue south of 44th Street to do repaving. The street repair crew waves at the last streetcar. Streetcars terminated at the 44th and France loop and transferred passengers to a hastily chartered shuttle bus.



Rear cover: In 1950 a Grand-Monroe car has derailed while turning from eastbound Lake Street onto northbound Nicollet Avenue, blocking the Nicollet and Selby-Lake lines. Two company service trucks from nearby Nicollet Station have been dispatched to reraill it. The Selby-Lake car turning onto Nicollet is probably shortlining itself, wying out so it can stay on schedule headed east, and losing its mileage between Nicollet and the Uptown terminal at Girard Avenue. Minneapolis Star-Tribune photo, Minnesota Historical Society Collection.





MINNESOTA STREETCAR MUSEUM

PO Box 16509
Minneapolis, MN 55416-0509
www.TrolleyRide.org

August 2021

Pursuant to board action at the August 5, 2021 meeting of the board of directors and in honor of the 50th anniversary of operation of the Como-Harriet Streetcar Line the attached materials are being republished by the Minnesota Streetcar Museum under the under the Creative Commons "Attribution-ShareAlike 4.0 International" and "Attribution-ShareAlike 3.0 Unported" licenses. You may choose either license as suited for your needs. In particular, the 3.0 license is meant to be compatible with the Wikipedia project.

In general, these licenses will allow you to freely:

- **Share** — copy and redistribute the material in any medium or format
- **Adapt** — remix, transform, and build upon the material for any purpose, even commercially.

Under the following terms:

- **Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
 - **Please credit the *Minnesota Streetcar Museum* and provide our URL www.trolleyride.org** We would also appreciate hearing about your re-use of our materials though that is not a requirement of the license.
- **ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.
- **No additional restrictions** — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.

Please review these licenses at the Creative Commons site for full legal code and details on allowed uses:

- Creative Commons Attribution-ShareAlike 4.0 International:
 - <https://creativecommons.org/licenses/by-sa/4.0/legalcode>
- Creative Commons Attribution-ShareAlike 3.0 Unported
 - <https://creativecommons.org/licenses/by-sa/3.0/legalcode>

If these licenses are not appropriate for your needs, for example you want to use the material commercially without crediting us or do not want to share your contributions under the same license please reach out to us for other options.

We Make Minnesota's Electric Railway History Come Alive!